CHAPTER 10

OTHER INDIAN ACCOUNTING STANDARDS



UNIT 1:
INDIAN ACCOUNTING STANDARD 41: AGRICULTURE

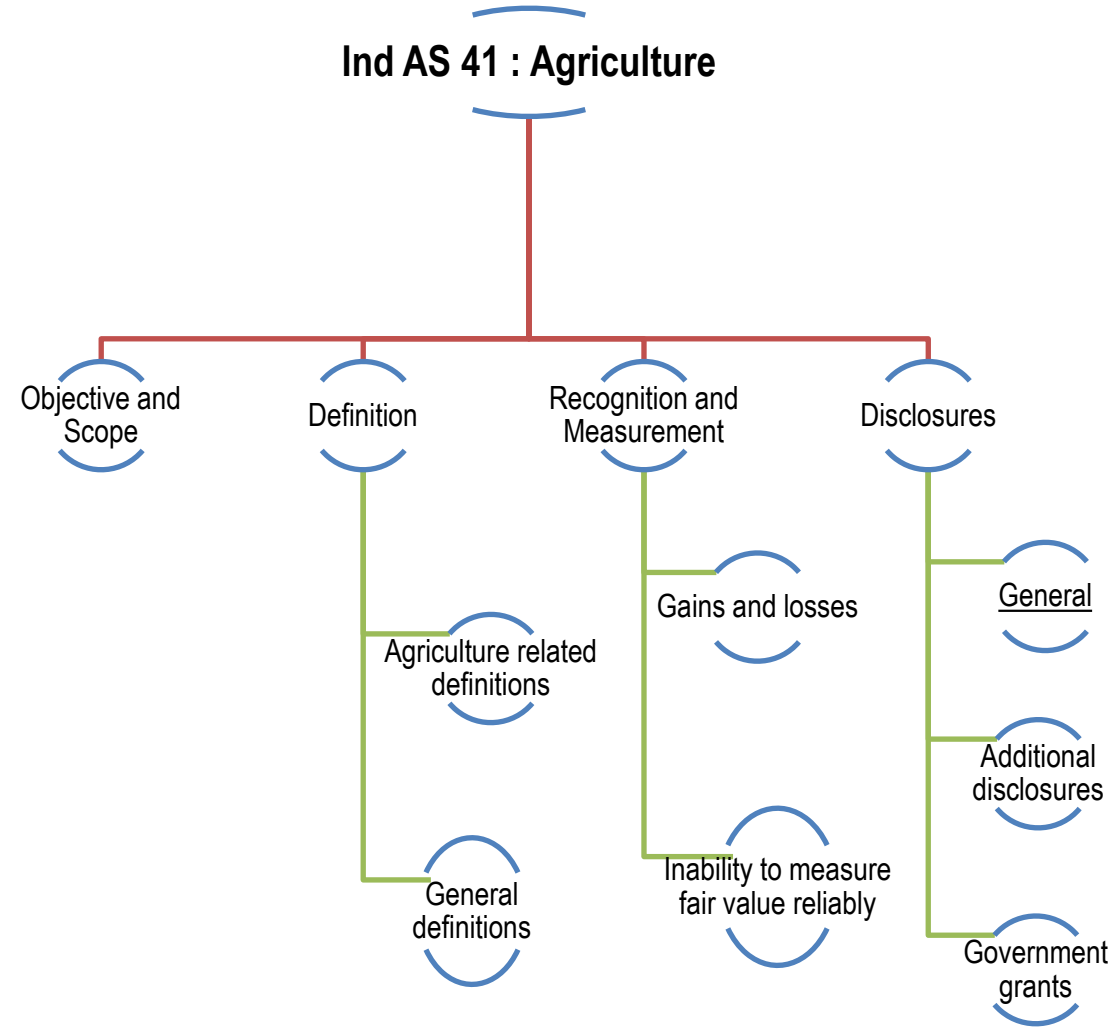
LEARNING OUTCOMES

After studying this unit, you will be able to:

- State the objective and scope of the standard
- Define the terms agricultural activity, agricultural produce, bearer plant, biological asset and biological transformation
- Explain the principles of recognition and measurement
- Compute the gain and loss on initial and subsequent measurement
- Account for the grant relating to a biological asset
- List the various disclosures prescribed in this standard

© The Institute of Chartered Accountants of India

UNIT OVERVIEW



© The Institute of Chartered Accountants of India

1.1 INTRODUCTION AND OBJECTIVE

Ind AS 41, Agriculture is the first standard that specifically covers the accounting and reporting requirements for the primary sector. Prior to this standard, there were no established guidance on agriculture and allied industry. This Standard introduces a fair value model to agriculture accounting which is a major shift away from the traditional cost model widely applied in primary industry.

Ind AS 41 Agriculture sets out the accounting for agricultural activity, the management of the transformation of biological assets (living plants and animals) into agricultural produce (harvested product of the entity's biological assets). The standard generally requires biological assets to be measured at fair value less costs to sell.

Ind AS 41 addresses following key critical issues:

(a) When should a biological asset or agricultural produce be recognised on the Balance Sheet?

(b) At what value should a recognised biological asset or agricultural produce be measured?

(c) How should the differences in value of a recognised biological asset or agricultural produce be accounted for between two different reporting dates?

(d) What should be the key disclosures?

1.2 SCOPE

1. This Standard shall be applied to account for the following when they **relate to agricultural activity**:

   (a) biological assets;

   (b) agricultural produce at the point of harvest; and

   (c) government grants

2. **Ind AS 41 does not apply to:**

   (a) land related to agricultural activity : for example, the land on which the biological assets grow, regenerate and/or degenerate (Ind AS 16 *Property, Plant and Equipment* and Ind AS 40 *Investment Property*);

© The Institute of Chartered Accountants of India

(b) bearer plants related to agricultural activity. Such bearer plants are covered within the scope of Ind AS 16, Property, plant and Equipment and is accounted as per the provisions of that standard. However, this Standard applies to the produce on those bearer plants.

(c) government grants related to bearer plants (Ind AS 20 *Accounting for Government Grants and Disclosure of Government Assistance*).

(d) intangible assets associated with the agricultural activity, for example licenses and rights are covered under Ind AS 38 *Intangible Assets* and provisions of this standard will be applicable.

(e) right-of-use assets arising from a lease of land related to agricultural activity (Ind AS 116, Leases).

This Standard is applied to agricultural produce, which is the **harvested product** of the entity's biological assets, **only at the point of harvest**. Thereafter, Ind AS 2 or another applicable Standard is applied.

Examples 1 & 2

1. Processing of grapes into wine by a vintner who has grown the grapes. While such processing may be a logical and natural extension of agricultural activity, and the events taking place may bear some similarity to biological transformation, such processing is not included within the definition of agricultural activity in this Standard.

2. Agriculture produces after the point of harvest, for example Wool, meat, fruit, rubber, logs that are processed subsequently are not covered within purview of this standard and Ind AS 2 *Inventories* shall apply.

The table below provides examples of biological assets, agricultural produce, and products that are the result of processing after harvest:

Biological assets	Agricultural produce	Products that are the result of processing after harvest
Sheep	Wool	Yarn, carpet
Trees in a timber plantation	Felled Trees	Logs, lumber
Dairy Cattle	Milk	Cheese
Pigs	Carcass	Sausages, cured hams

© The Institute of Chartered Accountants of India

Cotton plants	Harvested cotton	Thread, clothing
Sugarcane	Harvested cane	Sugar
Tobacco plants	Picked leaves	Cured tobacco
Tea bushes	Picked leaves	Tea
Grape vines	Picked grapes	Wine
Fruit trees	Picked fruit	Processed fruit
Rubber trees	Harvested latex	Rubber products

Some plants, for example, tea bushes, grape vines, oil palms and rubber trees, usually meet the definition of a bearer plant and are within the scope of Ind AS 16, *Property, plant and Equipment*. However, the produce growing on bearer plants, for example, tea leaves, grapes, oil palm fruit and latex, are within the scope of Ind AS 41.

1.3 RELEVANT DEFINITIONS

The following are the key Agriculture-related definitions:

(a) **Agricultural activity** refers to the management by an entity of the biological transformation and harvest of biological assets for sale or for conversion into agricultural produce or into additional biological assets.

The standard states that 'agricultural activity' covers a wide range of activities, e.g. 'raising livestock, forestry, annual or perennial cropping, cultivating orchards and plantations, floriculture, and aquaculture (including fish farming)'. Nevertheless, these agricultural activities have certain common features:

I. **Capability to change** Living animals and plants are capable of biological transformation;

II. **Management of change** Management facilitates biological transformation by enhancing, or at least stabilising, conditions necessary for the process to take place (for example, nutrient levels, moisture, temperature, fertility, and light). Such management distinguishes agricultural activity from other activities. For example, harvesting from unmanaged sources (such as ocean fishing and deforestation) is not agricultural activity; and

III. **Measurement of change** The change in quality (for example, genetic merit, density, ripeness, fat cover, protein content, and fibre strength) or quantity (for example,

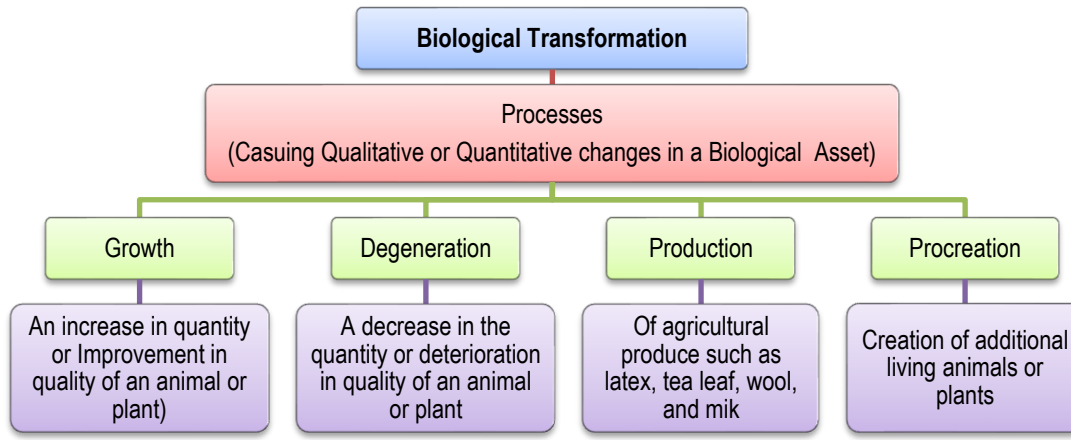
© The Institute of Chartered Accountants of India

progeny, weight, cubic metres, fibre length or diameter, and number of buds) brought about by biological transformation or harvest is measured and monitored as a routine management function.

Ind AS 41 does not deal with the processing of agricultural produce after harvest. The standard makes it clear that, even if the processing is considered 'a logical and natural extension of agricultural activity, and the events taking place bear some similarity to biological transformation, such processing is not included within the definition of agricultural activity'. For example, the process of brewing beer – in which yeast (a fungus) converts sugars into alcohol – would not meet the definition of agricultural activity in the standard. Similarly, cheese production would fall outside the definition of agricultural activity.

(b) **Biological Asset** is defined as a living animal or plant.

(c) **Biological transformation** comprises the processes of growth, degeneration, production, and procreation that cause qualitative or quantitative changes in biological asset.



(d) **Agricultural produce** is the harvested product of the entity's biological assets.

Ind AS 41 only applies to agricultural produce (i.e. harvested produce) at the point of harvest; not prior or subsequent to harvest. Under Ind AS 41, unharvested agricultural produce is considered to be part of the biological asset from which it will be harvested. Therefore, before harvest, agricultural produce should not be accounted for separately from the biological asset from which it comes. For example, milk is accounted for as part of the dairy cow right up to the moment at which the cow is milked.

Subsequent to harvest, agricultural produce is accounted for under Ind AS 2 or another standard, if applicable. Under Ind AS 2, agricultural produce is initially recognised as inventory at its fair value less costs to sell (measured in accordance with Ind AS 41), which becomes its cost for Ind AS 2 purposes.

© The Institute of Chartered Accountants of India

(e) **Harvest** is the detachment of produce from a biological asset or the cessation of a biological asset's life processes.

(f) **Fair Value** is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. (The definition of Fair value is as given in Ind AS 113, Fair Value Measurement)

(g) **Costs to sell** are the incremental costs directly attributable to the disposal of an asset, excluding finance costs and income taxes. Therefore, of all the costs that are necessary for a sale to occur, costs to sell include those that would otherwise not arise. Examples of costs to sell could include brokers' and dealers' commissions, levies by regulatory agencies and commodity exchanges, transfer taxes and duties.

(h) **Bearer plant** may be defined as a living plant that:

i. is used in the production or supply of agricultural produce;

ii. is expected to bear produce for more than one period; and

iii. has a remote likelihood of being sold as agricultural produce, except for incidental scrap sales.

All of the above criteria need to be met for a plant to be considered a bearer plant.

The definition captures plants that would intuitively be considered to be bearers, for instance, grape vines. Some plants that may appear to be consumable, such as the root systems of perennial plants (e.g. sugar cane, bamboo or asparagus), but due to the perennial nature of their root systems, they are expected to meet the definition of a bearer plant.

Annual crops and other plants that are held solely to be harvested as agricultural produce (e.g. many traditional arable crops such as maize, wheat and soya, as well as trees grown for lumber), are explicitly excluded from the definition of a bearer plant. In addition, plants that have a dual use (i.e. plants cultivated to bear agricultural produce, but for which there is more than remote likelihood that the plant itself will be harvested and sold as agricultural produce, beyond incidental scrap sales) are not bearer plants. This may be the case when, for example, an entity holds rubber trees to sell both the latex as agricultural produce and the trees as lumber.

For example, tea bushes, grape vines, oil palms and rubber trees, usually meet the definition of a bearer plant and are outside the scope of Ind AS 41 and covered under Ind AS 16.

However, produce growing on bearer plant is a biological asset.

This is important to note here that animals are not covered in the definition of the bearer plants. For example, Sheep, Cows etc are not bearer plants.

© The Institute of Chartered Accountants of India

Illustration 1

ABC Ltd grows vines, harvests the grapes and produces wine. Which of these activities are in the scope of Ind AS 41?

Solution

The grape vines are bearer plants that continually generate crops of grapes which are covered by Ind AS 16, *Property, Plant and Equipment*.

When the entity harvests the grapes, their biological transformation ceases and they become agricultural produce covered by Ind AS 41, *Agriculture*.

Wine involves a lengthy maturation period. This process is similar to the conversion of raw materials to a finished product rather than biological transformation hence treated as inventory in accordance with Ind AS 2, *Inventories*.

*****

1.4 RECOGNITION OF ASSETS

Entities are required to recognise a biological asset or agricultural produce when, and only when, all of the following conditions are met:

a) the entity controls the asset as a result of past events;

Control over biological assets or agricultural produce may be evidenced by legal ownership or rights to control, for example legal ownership of cattle and the branding or otherwise marking of the cattle on acquisition, birth, or weaning.

b) it is probable that future economic benefits associated with the asset will flow to the entity; and

Future economic benefits are expected to flow to the enterprise from its ownership or control of the asset. The future benefits are normally assessed by measuring the significant physical attributes.

c) the fair value or cost of the asset can be measured reliably.

© The Institute of Chartered Accountants of India

1.5 MEASUREMENT

Biological Asset should be measured on initial recognition and at the end of each reporting period at its fair value less costs to sell, except for the case where the fair value cannot be measured reliably.

There is a presumption that fair value can be measured reliably for a biological asset. In the following cases biological asset should be measured at its cost less any accumulated depreciation and any accumulated impairment losses in accordance with Ind AS 2, Ind AS 16 and Ind AS 36:

- quoted market prices are not available for the biological assets and;
- alternative fair value measurements are determined to be clearly unreliable.

Once the fair value of such a biological asset becomes reliably measurable, an entity shall measure it at its Fair value less costs to sell.

The presumption can be rebutted only on initial recognition. An entity that has previously measured a biological asset at its fair value less costs to sell continues to measure the biological asset at its fair value less costs to sell until disposal.

In all cases, an entity measures agricultural produce at the point of harvest at its fair value less costs to sell. This Standard reflects the view that the fair value of agricultural produce at the point of harvest can always be measured reliably.

Agricultural produce harvested from an entity's biological assets should be measured at its fair value less costs to sell at the point of harvest. Such measurement is the cost at that date when applying Ind AS 2 or another applicable Standard.

The fair value measurement of a biological asset or agricultural produce may be facilitated by grouping biological assets or agricultural produce according to significant attributes; for example, by age or quality. An entity selects the attributes corresponding to the attributes used in the market as a basis for pricing.

The fair value less cost to sell of a biological asset can change due to both physical changes and price changes in the market.

Entities often enter into contracts to sell their biological assets or agricultural produce at a future date. Contract prices are not necessarily relevant in measuring fair value, because fair value reflects the current market conditions in which market participant buyers and sellers would enter into a transaction. As a result, the fair value of a biological asset or agricultural produce is not adjusted because of the existence of a contract.

Cost may sometimes approximate fair value, particularly when:

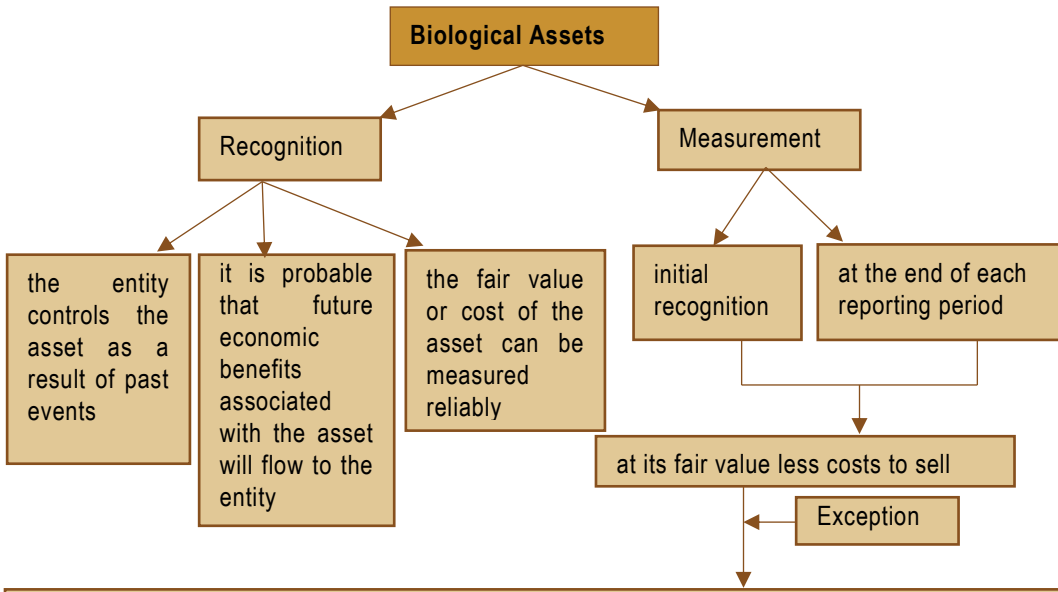
a) little biological transformation has taken place since initial cost incurrence (for example, for

© The Institute of Chartered Accountants of India

fruit tree seedlings planted immediately prior to the end of a reporting period or newly acquired livestock); or

b) the impact of the biological transformation on price is not expected to be material (for example, for the initial growth in a 30-year pine plantation production cycle)

Biological assets are often physically attached to land (for example, trees in a plantation forest). There may be no separate market for biological assets that are attached to the land but an active market may exist for the combined assets, that is, the biological assets, raw land, and land improvements, as a package. An entity may use information regarding the combined assets to measure the fair value of the biological assets. For example, the fair value of raw land and land improvements may be deducted from the fair value of the combined assets to arrive at the fair value of biological assets.



This presumption **can be rebutted only on initial recognition for a biological asset** when

a. quoted market prices are not available and

b. alternative fair value measurements determined are clearly unreliable.

In such a case, it shall be **measured at its cost less any accumulated depreciation and any accumulated impairment losses**.

Note: Once the fair value of such a biological asset becomes reliably measurable, an entity shall measure it at its fair value less costs to sell.

Note:

Once a **non-current** biological asset meets the criteria to be classified as held for sale (or is included in a disposal group that is classified as held for sale) as per Ind AS 105, it is presumed that fair value can be measured reliably.

© The Institute of Chartered Accountants of India

Illustration 2

A farmer owned a dairy herd, of three years old cattle as at 1st April, 20X1 with a fair value of ₹ 13,750 and the number of cattle in the herd was 250.

The fair value of three-year cattle as at 31st March, 20X2 was ₹ 60 per cattle. The fair value of four-year cattle as at 31st March, 20X2 is ₹ 75 per cattle.

Calculate the measurement of group of cattle as at 31st March, 20X2 stating price and physical change separately.

Solution

Particulars	Amount (₹)
Fair value as at 1st April, 20X1	13,750
Increase due to Price change [250 x {60 - (13,750/250)}]	1,250
Increase due to Physical change [250 x {75-60}]	3,750
Fair value as at 31st March, 20X2	18,750

At the end of reporting period 31st March 20X2

Biological Asset (Cattle A/c)	Dr.	5,000	
To Gain – Change in value (P/L A/c)			5,000

(Being change in value of Cattle recognised at the end of the reporting period)

*****

Illustration 3

XYZ Ltd., on 1st December, 20X3, purchased 100 sheep from a market for ₹ 5,00,000. The transaction cost of 2% on the market price of the sheep was incurred which was paid by the seller. Sheep's fair value increased from ₹ 500,000 to ₹ 600,000 on 31st March, 20X4. Transaction cost of 2% would have to be incurred by the seller to get the sheep to the relevant market.

Determine the fair value on the date of purchase and the reporting date and pass necessary journal entries thereon.

Solution

The fair value less cost to sell of sheep's on the date of purchase would be ₹ 4,90,000 (5,00,000-10,000). Expense of ₹ 10,000 would be recognised in profit and loss.

© The Institute of Chartered Accountants of India

On date of Purchase

Biological Asset	Dr.	4,90,000	
Loss on initial recognition	Dr.	10,000	
To Bank			5,00,000

(Being biological asset purchased)

On 31st March, 20X4 sheep would be measured at ₹ 5,88,000 as Biological Asset (6,00,000-12,000) and gain of ₹ 98,000 (5,88,000 - 4,90,000) would be recognised in profit or loss.

At the end of reporting period

Biological Asset	Dr.	98,000	
To Gain – Change in fair value			98,000

(Being change in fair value recognised at the end of reporting period)

*****

1.6 GAINS AND LOSSES

1) Biological Asset:

A gain or loss arising on initial recognition of a Biological Asset at Fair value less costs to sell and from a change in Fair value less costs to sell of a biological asset shall be included in Profit or Loss for the period in which it arises.

A loss may arise on initial recognition of a biological asset, because cost to sell are deducted in determining fair value less cost to sell of a biological asset. A gain may arise on initial recognition of a biological asset, such as when a calf is born.

Example 3

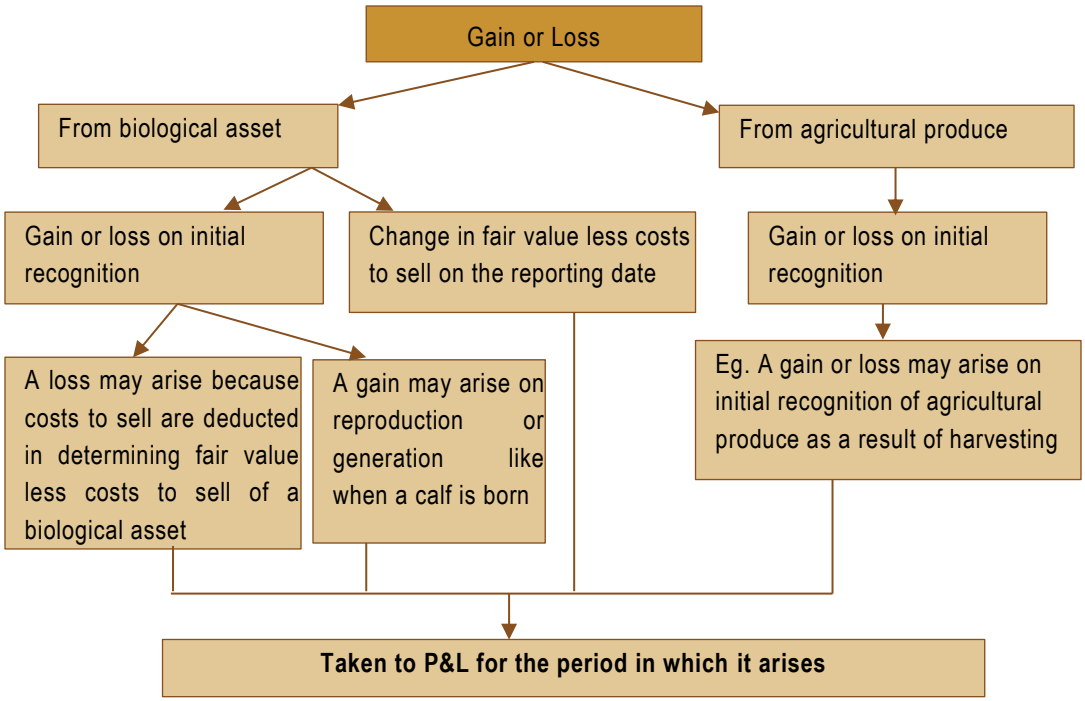
During the reporting period 20X1-20X2, an entity is having a cow which has given birth to a calf. The fair value less estimated cost to sell for a calf is ₹ 5,000. The amount of ₹ 5,000 is, therefore, immediately recognised in the Statement of Profit and Loss.

2) Agriculture Produce:

A gain or loss arising on initial recognition of agricultural produce at fair value less costs to sell shall be included in profit or loss for the period in which it arises.

© The Institute of Chartered Accountants of India

A gain or loss may arise on initial recognition of agricultural produce as a result of harvesting.



1.7 GOVERNMENT GRANTS

1) Biological Asset measured at fair value less cost to sell:

a) Unconditional Grant:

An unconditional government grant related to a biological asset measured at its fair value less costs to sell shall be recognised in profit or loss when, and only when, the government grant becomes receivable.

b) Conditional Grant:

If a government grant related to a biological asset measured at its fair value less costs to sell is conditional, including when a government grant requires an entity not to engage in specified agricultural activity, an entity shall recognise the government grant in profit or loss when, and only when, the conditions attaching to the government grant are met.

© The Institute of Chartered Accountants of India

Terms and conditions of government grants vary. For example, a grant may require an entity to farm in a particular location for five years and require the entity to return the entire grant if it farms for a period shorter than five years. In this case, the grant is not recognised in profit or loss until the five years have passed. However, if the terms of the grant allow part of it to be retained according to the time elapsed, the entity recognises that part in profit or loss as time passes.

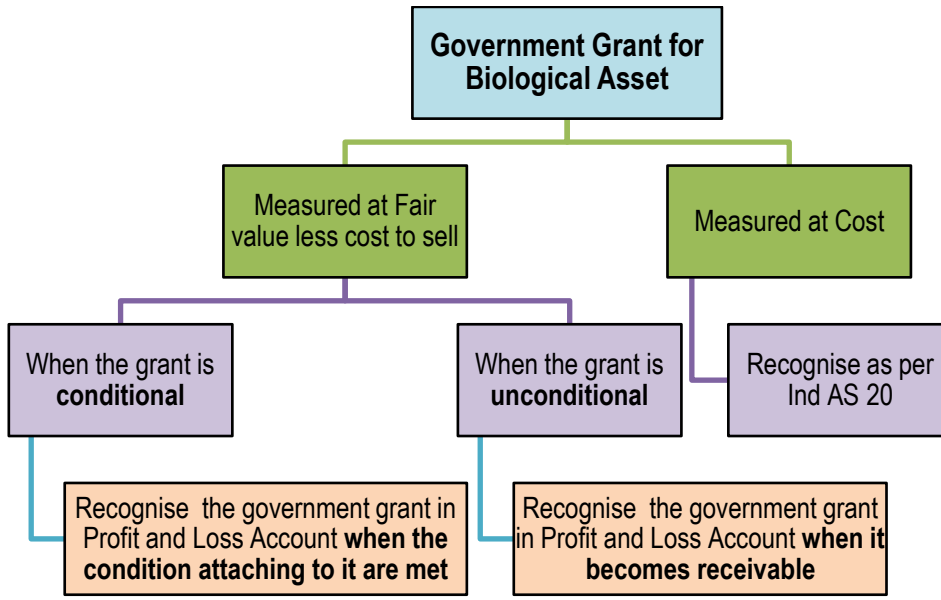
Example 4

Sun Ltd cultivated a huge plot of land. The government offers a grant of ₹ 10 crore under the condition that the land is being cultivated for 5 years. If the land will be cultivated for a shorter period, the entity is required to return the entire grant.

Therefore, the government grant will be recognised as income only after 5 years of cultivation. The situation would be different if the returning obligation referred to the years of not cultivating the land is with respect to retention of grant for the period till which the entity has cultivated the land. In this case, the amount of ₹ 10 crore would be recognised as income, proportionately with the time period, meaning ₹ 2 crore per annum.

2) Biological Asset measured at its cost:

If a government grant relates to a Biological Asset measured at its cost less any accumulated depreciation and any accumulated impairment losses i.e. (i.e. inability to measure fair value reliably), Ind AS 20 is applied.



© The Institute of Chartered Accountants of India

Illustration 4

Agro Foods Ltd. runs a poultry farm business. It has received a government grant from the government for setting up a new poultry unit in a backward area. Agro Foods Ltd used the amount of government grants to buy the first batch of broiler birds, incubators etc. The broiler birds are measured at fair value less costs to sell. However, the incubator machine is measured as per the cost model in Ind AS 16.

As such there are no conditions attached to the release of the government grants pertaining to purchase of poultry birds. However, as regards the investment in incubators and other related plant and machinery items, the government grant contains a condition that the plant and machinery item should be used for a minimum period of 3 years. The useful life of the incubator machine has also been determined to be 3 years in accordance with the management estimate of the time period over which the economic benefits embedded in the incubator machine shall be consumed.

Advise the accounting requirements prescribed in Ind AS 41 Agriculture and Ind AS 20 Accounting for Government Grants and Disclosure of Government Assistance in respect of both the government grants?

Solution

Ind AS 41 requires an unconditional government grant related to a biological asset measured at its fair value less costs to sell to be recognised in profit or loss when, and only when, the government grant becomes receivable. Accordingly, the amount of government grant attributable to the broiler birds which qualify as a biological bird shall be recognized in profit or loss account when the grant becomes receivable.

If a government grant is conditional, including when a government grant requires an entity not to engage in specified agricultural activity, an entity should recognize the government grant in profit or loss when, and only when, the conditions attaching to the government grant are met. This provision of Ind AS 41 is not applicable as we have been informed that there are no conditions attached to the release of the government grant pertaining to broiler birds. In the given case, the grant related to broiler birds has already been received for the purpose of providing immediate financial support to the entity with no future related conditions to be fulfilled. Accordingly, the grant relating to broiler birds is to be recognized in profit and loss in the period in which it is received.

If a government grant relates to a biological asset measured at its cost less any accumulated depreciation and any accumulated impairment losses, the entity applies Ind AS 20 Accounting for Government Grants and Disclosure of Government Assistance. The incubator machine does not

© The Institute of Chartered Accountants of India

qualify as a biological asset as it is specifically covered by Ind AS 16 which states that plant and machinery items used to develop or maintain biological assets is covered by Ind AS 16. Therefore, the provisions relating to Government grants contained in Ind AS 41 will not apply to the incubator machine. Therefore, we have to apply directly the provisions contained in IAS 20. Ind AS 20 contains two methods of presentation in financial statements of grants (or the appropriate portions of grants) related to assets are regarded as acceptable alternatives:

- One method recognises the grant as deferred income that is recognized in profit or loss on a systematic basis over the useful life of the asset.
- The other method deducts the grant in calculating the carrying amount of the asset. The grant is recognized in profit or loss over the life of a depreciable asset as a reduced depreciation expense.

Therefore, the grant relating to incubator machine will have to be accounted as a deferred income that is recognized in Profit or loss on a systematic basis over a period of 3 years in line with the condition attached to the grant. Alternatively, the grant may be deducted in determining the carrying amount of the incubator. In such a case the grant is recognised in Profit or Loss over the 3-year useful life of the depreciable incubator machine as a reduced depreciation expense.

1.8 DISCLOSURE

1) Description of biological assets and activities.

The entity is required to provide a description of each group of biological assets. This disclosure may take the form of a narrative or quantified description. An entity is encouraged to provide a quantified description of each group of biological assets, distinguishing between consumable and bearer biological assets or between mature and immature biological assets, as appropriate.

2) Gains and losses recognised during the period.

An entity shall disclose the aggregate gain or loss arising during the current period on initial recognition of biological assets and agricultural produce and from the change in fair value less costs to sell of biological assets.

© The Institute of Chartered Accountants of India

3) Reconciliation of changes in biological assets.

A detailed reconciliation is required of changes in the carrying amount of biological assets between the beginning and the end of the current period, which includes:

a) gain or loss arising from changes in fair value less costs to sell;

b) increases arising from purchases;

c) decreases attributable to sales and biological assets classified as held for sale (or included in a disposal group that is classified as held for sale) in accordance with Ind AS 105;

d) decreases due to harvest;

e) increases resulting from business combinations;

f) net exchange differences arising on the translation of financial statements into a different presentation currency, and on the translation of a foreign operation into the presentation currency of the reporting entity; and

g) other changes.

4) Restricted assets, commitments and risk management strategies.

The entity should disclose:

a) the existence and carrying amounts of biological assets whose title is restricted, and the carrying amounts of biological assets pledged as security for liabilities;

b) the amount of commitments for the development or acquisition of biological assets; and

c) financial risk management strategies related to agricultural activity.

5) Additional disclosures when fair value cannot be measured reliably.

If biological assets within the scope of Ind AS 41 are measured at cost less any accumulated depreciation and any accumulated impairment losses at the end of the period, the following disclosures are required:

a) a description of the biological assets;

b) an explanation of why fair value cannot be measured reliably;

c) the range of estimates within which fair value is highly likely to lie;

© The Institute of Chartered Accountants of India

d) the depreciation method used;

e) the useful lives or the depreciation rates used; and

f) the gross carrying amount and the accumulated depreciation and impairment losses at the beginning and end of the period.

6) Government grants

The following disclosures are required for government grants relating to agricultural activity:

a) the nature and extent of government grants recognised;

b) unfulfilled conditions and other contingencies attaching to government grants; and

c) significant decreases expected in the level of government grants.

Illustration 5

Moon Ltd prepares financial statements to 31st March, each year. On 1st April 20X1 the company carried out the following transactions:

-- *Purchased a land for ₹ 50 Lakhs.*

-- *Purchased 200 dairy cows (average age at 1st April, 20X1 is 2 years) for ₹ 10 Lakhs.*

-- *Received a grant of ₹ 1 million towards the acquisition of the cows. This grant was non-refundable.*

For the year ending 31st March, 20X2, the company has incurred following costs:

-- *₹ 6 Lakh to maintain the condition of the animals (food and protection).*

-- *₹ 4 Lakh as breeding fee to a local farmer.*

On 1st October, 20X1, 100 calves were born. There were no other changes in the number of animals during the year ended 31st March, 20X2. As of 31st March, 20X2, Moon Ltd had 3,000 litres of unsold milk in inventory. The milk was sold shortly after the year end at market prices.

Information regarding fair values is as follows:

Item	Fair Value less cost to sell		
	1st April, 20X1	1st October, 20X1	31st March, 20X2
	₹	₹	₹
Land	50 Lakhs	60 Lakhs	70 Lakhs
New born calves (per calf)	1,000	1,100	1,200

© The Institute of Chartered Accountants of India

Six month old calves (per calf)	*1,100*	*1,200*	*1,300*
Two year old cows (per cow)	*5,000*	*5,100*	*5,200*
Three year old cows (per cow)	*5,200*	*5,300*	*5,500*
Milk (per litre)	*20*	*22*	*24*

Prepare extracts from the Balance Sheet and Statement of Profit and Loss that would be reflected in the financial statements of the entity for the year ended 31st March, 20X2.

Solution

Extract from the Statement of Profit & Loss

	WN	Amount
Income		
Change in fair value of purchased dairy cow	WN 2	1,00,000
Government Grant	WN 3	10,00,000
Change in the fair value of newly born calves	WN 4	1,30,000
Fair Value of Milk	WN 5	72,000
Total Income		**13,02,000**
Expenses		
Maintenance Costs	WN 2	6,00,000
Breeding Fees	WN 2	4,00,000
Total Expense		**(10,00,000)**
Net Income		**3,02,000**

Extracts from Balance Sheet

Property, Plant and Equipment:		
Land	WN 1	50,00,000
Biological assets other than bearer plants:		
Dairy Cow	WN 2	11,00,000
Calves	WN 4	1,30,000
		62,30,000

© The Institute of Chartered Accountants of India

Inventory:		
Milk	WN 5	72,000
		72,000

Working Notes:

1. **Land:** The purchase of the land is not covered by Ind AS 41. The relevant standard which would apply to this transaction is Ind AS 16. Under this standard the land would initially be recorded at cost and depreciated over its useful economic life. This would usually be considered to be infinite in the case of land and so no depreciation would be appropriate. Under Cost Model no recognition would be made for post-acquisition changes in the value of land. The allowed alternative treatment under Revaluation Model would permit the land to be revalued to market value with the revaluation surplus taken to the other comprehensive income. We have followed the Cost Model.

2. **Dairy Cows:** Under the 'fair value model' laid down in Ind AS 41 the mature cows would be recognised in the Balance Sheet at 31st March, 20X2 at the fair value of 200 x ₹ 5,500 = ₹ 11,00,000.

   Increase in price change 200 x (5,200-5,000) = 40,000

   Increase in physical change 200 x (5,500-5,200) = 60,000

   The total difference between the fair value of matured herd and its initial cost (₹ 11,00,000 – ₹ 10,00,000 = a gain of ₹ 1,00,000) would be recognised in the profit and loss along with the maintenance costs and breeding fee of ₹ 6,00,000 and ₹ 4,00,000 respectively.

3. **Grant:** Grant relating to agricultural activity is not subject to the normal requirement of Ind AS 20. Under Ind AS 41 such grants are credited to income as soon as they are unconditionally receivable rather than being recognised over the useful economic life of the herd. Therefore, ₹ 10,00,000 would be credited to income of the company.

4. **Calves:** They are a biological asset, and the fair value model is applied. The breeding fees are charged to income and an asset of 100 x ₹ 1,300 = ₹ 1,30,000 recognised in the Balance Sheet and credited to Profit and Loss.

5. **Milk:** This is agricultural produce and initially recognised on the same basis as biological assets. Thus the milk would be valued at 3,000 x ₹ 24 = ₹ 72,000. This is regarded as 'cost' for the future application of Ind AS 2 to the unsold milk.

*****

© The Institute of Chartered Accountants of India

1.9 EXTRACTS OF FINANCIAL STATEMENTS OF LISTED ENTITY

Following is the extract from the financial statements of the listed entity 'Avanti Feeds Limited' for the financial year 2021-2022 with respect to 'Biological assets', and its accounting policy.

Balance Sheet as at 31st March, 2022

(All amounts in Lakhs in Indian Rupees, unless otherwise stated)

Particulars	Note No.	As at 31st March, 2022	As at 31st March, 2021
ASSETS			
Non-current Assets			
Property, Plant and Equipment	3	14,622.48	15,586.59
Capital work-in-progress	3	2,312.85	12.26
Intangible assets	4	7.15	11.27
Right-of-use Assets	5(a)	177.95	132.05
Financial assets			
Investments	6(a)	20,702.54	19,703.81
Loans	7(a)	60.81	72.97
Other financial assets	8	645.08	570.88
Non-current tax assets (net)	20(b)	1,642.37	1,589.54
Other non-current assets	9 (a)	779.52	2.94
Total Non-current Assets		**40,950.75**	**37,682.31**
Current Assets			
Inventories	10 (a)	71,467.25	31,333.73
Biological Assets	10 (b)	84.14	66.25

10 b) Biological Assets

Particulars	As at 31st March, 2022	As at 31st March, 2021
Biological Assets (Refer note below)	**84.14**	**66.25**
Note:		
Brood stock	51.93	66.25
Post Larval	32.21	-
	84.14	66.25

Reconciliation of changes in the carrying amount of biological assets:

Particulars	As at 31st March, 2022	As at 31st March, 2021
As at beginning of the year	66.25	-
Increase due to purchase/production/physical change	742.00	1,182.44
Decrease due to Physical change/sales	724.11	1,116.19
Net change in the Fair value less estimated cost to sell	**84.14**	**66.25**

© The Institute of Chartered Accountants of India

ACCOUNTING POLICY

Biological Assets

The Company recognises biological assets only when, the Company controls the assets as a result of past events, it is probable that future economic benefits associated with such assets will flow to the Company. Biological assets of the Company are in the nature of Consumable Biological Assets. It is bifurcated into Brood Stock, (the Parents) and harvested species which undergo biological transformation under different stages as nauplius, Zoea, Mysis and Post Larvae. The Company sells the biological assets harvested from brood stock at nauplius and Post Larvae Stages. The Brood Stock has a maximum useful life of 6 months for laying eggs, and thereafter these are destroyed.

The valuation of the Brood stock biological assets are determined on the following basis:

Brood stock are used for captive consumption or to support farmers, it cannot be sold before the end of its useful life and as such, there is no active market. Other references to market prices such as market prices for similar assets are also not available due to the uniqueness of the breed. Valuation based on a discounted cash flow method is considered to be unreliable given the uncertainty with respect to mortality rates and production. Consequently, brood stock and Shrimp seed (Different stages) are measured at cost, less depreciation and impairment losses.

The transmission phase from nauplius to Zoea and Mysis are not considered as significant transformation of biological asset and hence Zoea and Mysis are not valued as per Ind AS 41.

The Company recognises other biological assets at the fair value or cost of the assets that can be measured reliably. Expenditure incurred on biological assets are measured on initial recognition and at the end of each reporting period at its fair value less costs to sell. The gain or loss arising from a change in fair value less costs to sell the biological assets are included in Statement of Profit and Loss for the period in which it arises.

Management estimates the fair value less costs to sell of biological assets, taking into account the most reliable evidence available at each reporting date. The future realization of these biological assets may be affected by their survival rate, age and / or other market - driven changes that may reduce the future economic benefits associated with such assets. The fair value is arrived at based on the observable market prices of biological assets adjusted for cost to sells, as applicable.

(Source: Annual Report 2021-2022 – Avanti Feeds Limited')

© The Institute of Chartered Accountants of India

TEST YOUR KNOWLEDGE

Questions

1. Entity A purchased cattle at an auction on 30th June 20X1

Purchase price at 30th June 20X1	₹ 1,00,000
Costs of transporting the cattle back to the entity's farm	₹ 1,000
Sales price of the cattle at 31st March, 20X2	₹ 1,10,000

The company would have to incur similar transportation costs if it were to sell the cattle at auction, in addition to an auctioneer's fee of 2% of sales price. The auctioneer charges 2% of the selling price, from both, the buyer as well as the seller.

Calculate the amount at which cattle is to be recognised in books on initial recognition and at year end 31st March, 20X2. Show corresponding journal entries.

2. XY Ltd. is a farming entity where cows are milked on a daily basis. Milk is kept in cold storage immediately after milking and sold to retail distributors on a weekly basis. On 1st April 20X1, XY Ltd. had a herd of 500 cows which were all three years old.

During the year, some of the cows became sick and on 30th September 20X1, 20 cows died. On 1st October 20X1, XY Ltd. purchased 20 replacement cows from the market for ₹ 21,000 each. These 20 cows were all one-year old when they were purchased.

On 31st March 20X2, XY Ltd. had 1,000 litres of milk in cold storage which had not been sold to retail distributors. The market price of milk at 31st March 20X2 was ₹ 20 per litre. When selling the milk to distributors, XY Ltd. incurs selling costs of ₹ 1 per litre. These amounts did not change during March 20X2 and are not expected to change during April 20X2.

Information relating to fair value and costs to sell is given below:

Date	Fair value of a dairy cow (aged)				Costs to sell a cow
	1 year	1.5 years	3 years	4 years	
1st April 20X1	20,000	22,000	27,000	25,000	1,000
1st October 20X1	21,000	23,000	28,000	26,000	1,000
31st March 20X2	21,500	23,500	29,000	26,500	1,100

© The Institute of Chartered Accountants of India

The fair value of a 3.5 years old cow on 1st October 20X1 is ₹ 27,000.

Pass necessary journal entries of above transactions with respect to cows in the financial statements of XY Ltd. for the year ended 31st March, 20X2? Also show the amount lying in inventory if any.

3. Company X purchased 100 goats at an auction for ₹ 1,00,000 on 30th September 20X1. Subsequent transportation costs were ₹ 1,000 that is similar to the cost X would have to incur to sell the goat at the auction. Additionally, there would be a 2% selling fee on the market price of the goat to be incurred by the seller.

On 31st March 20X2, the market value of the goat in the most relevant market increases to ₹ 1,10,000. Transportation costs of ₹ 1,000 would have to be incurred by the seller to get the goat to the relevant market. An auctioneer's fee of 2% on the market price of the goat would be payable by the seller.

On 1st June 20X2, X sold 18 goats for ₹ 20,000 and incurred transportation charges of ₹ 150. In addition, there was a 2% auctioneer's fee on the market price of the goat paid by the seller.

On 15th September 20X2, the fair value of the remaining goat was ₹ 82,820. 42 goats were slaughtered on that day, with a total slaughter cost of ₹ 4,200. The total market price of the carcasses on that day was ₹ 48,300, and the expected transportation cost to sell the carcasses is ₹ 420. No other costs are expected.

On 30th September 20X2, the market price of the remaining 40 goat was ₹ 44,800. The expected transportation cost is ₹ 400. Also, there would be a 2% auctioneer's fee on the market price of the goat payable by the seller.

Pass Journal entries for the initial and subsequent measurement for all above transactions. Interim reporting periods are of 30th September and 31 March and the company determines the fair values on these dates for reporting.

4. On 1st November, 20X1, C Agro Ltd. purchased 100 goats of special breed from a market for ₹ 10,00,000 with a transaction cost of 2%. Goats fair value decreased from ₹ 10,00,000 to ₹ 9,00,000 as on 31st March, 20X2.

Determine the fair value on the date of purchase and as on financial year ended 31st March, 20X2 under both the cases viz-

(i) the transaction costs are borne by the seller and

(ii) the transaction costs are incurred by the seller and purchaser both

© The Institute of Chartered Accountants of India

Also pass journal entries under both the situations on both dates.

5. Analyse whether the following activities fall within the scope of Ind AS 41 with proper reasoning:

- Managing animal-related recreational activities like Zoo
- Fishing in the ocean
- Fish farming
- Development of living organisms such as cells, bacteria and viruses
- Growing of plants to be used in the production of drugs
- Purchase of 25 dogs for security purpose of the company's premises.

Answers

1. Initial recognition of cattle

	₹
Fair value less costs to sell (₹ 1,00,000 – ₹ 1,000 - ₹ 2,000)	97,000
Cash outflow (₹ 1,00,000 + ₹ 1,000 + ₹ 2,000)	1,03,000
Loss on initial recognition	6,000
Cattle Measurement at year end	
Fair value less costs to sell (₹ 1,10,000 – 1,000 – (2% x 1,10,000))	1,06,800

At 31st March, 20X2, the cattle is measured at ₹ 1,06,800 i.e. fair value less cost to sell (transportation ₹ 1,000 and the estimated auctioneer's fee of ₹ 2,200). The estimated transportation costs of getting the cattle to the auction of ₹ 1,000 are deducted from the sales price in determining fair value.

Journal Entries on 30th June, 20X1

(All figures in ₹)

Biological Asset (Cattle A/c)	Dr.	97,000	
Loss on initial recognition	Dr.	6,000	
To Bank (Purchase and cost of transportation on purchase paid by buyer)			1,03,000
(Being biological asset purchased)			

© The Institute of Chartered Accountants of India

Journal Entries on 31st March, 20X2

(All figures in ₹)

Biological Asset (Cattle A/c)	Dr.	9,800	
To Gain on remeasurement (P/L A/c)			9,800
(Subsequent measurement of cattle at fair value less costs to sell)			

2. Journal Entries on

(All figures in ₹)

30th September 20X1	Loss (on death of 20 cows) (W.N.)	Dr.	5,20,000	
	To Biological asset			5,20,000
	(Loss booked on death of 20 cows)			
1st October 20X1	Biological Asset (purchase of 20 new cows) (W.N.)	Dr.	4,00,000	
	Loss on initial recognition (of 20 new cows)	Dr.	20,000	
	To Bank			4,20,000
	(Initial recognition of 20 new purchased cows at fair value less costs to sell)			
1st October 20X1	Loss on remeasurement of old cows	Dr.	2,88,000	
	To Biological asset [(1,30,00,000 – 5,20,000) – 1,21,92,000]			2,88,000
	(Subsequent measurement of cows at fair value less costs to sell)			
	Biological Asset (4,48,000 – 4,00,000)	Dr.	48,000	
	To Gain on remeasurement of new cows			48,000
	(Subsequent measurement of cows at fair value less costs to sell)			

Inventory (Milk) as at 31st March, 20X2 = ₹ 19,000 [1,000 x (20 – 1)].

© The Institute of Chartered Accountants of India

Working Note:

Calculation of Biological asset at various dates

Date	Number	Age	Fair Value (₹)	Cost to Sell (₹)	Net (₹)	Biological asset (₹)
1st April 20X1	500	3 years	27,000	1,000	26,000	1,30,00,000
30th September 20X1	(20)	3.5 years	27,000	1,000	26,000	(5,20,000)
1st October 20X1	20	1 year	21,000	1,000	20,000	4,00,000
						1,28,80,000
31st March 20X2	480	4 years	26,500	1,100	25,400	1,21,92,000
	20	1.5 years	23,500	1,100	22,400	4,48,000
						1,26,40,000

3. Value of goat at initial recognition (30th September 20X1) **(All figures are in ₹)**

Biological asset (goat)	Dr.	97,000*	
Loss on initial recognition	Dr.	4,000	
To Bank (Purchase and cost of transportation on purchase paid by buyer)			1,01,000
(Initial recognition of goat at fair value less costs to sell)			

*Fair value of goat = 1,00,000 – 1,000 – 2,000 (2% of 1,00,000) = 97,000

Subsequent measurement at 31st March 20X2 **(All figures are in ₹)**

Biological Assets (Goat)	Dr.	9,800	
To Gain on Sale (Profit & Loss)			9,800
(Subsequent measurement of Goat at fair value less costs to sell (1,06,800** – 97,000))			

** Fair value of goat = 1,10,0000 – 1,000 – 2,200 (2% of 1,10,000) = 1,06,800

© The Institute of Chartered Accountants of India

Sale of goat on 1st June 20X2 **(All figures are in ₹)**

Biological Assets (Goats)	Dr.	226	
To Gain on Sale (Profit & Loss)			226
(Subsequent re-measurement of 18 goats at fair value less costs to sell just prior to the point at which they are sold [19,450 - {(1,06,800/100) x 18}])			
Cost to Sales (20,000 – 400 {i.e. 2% of 20,000} – 150)	Dr.	19,450	
To Biological Assets (Goats)			19,450
(Recording a cost of sales figure separately with a corresponding reduction in the value of the biological assets)			
Bank	Dr.	19,450	
Selling expenses (150 + 400)	Dr.	550	
To Revenue			20,000
(Recognition of revenue from sale of goat)			

Transfer of Goat to Inventory on 15th September 20X2 **(All figures are in ₹)**

Inventory (48,300 - 420)	Dr.	47,880	
Loss on remeasurement	Dr.	1,176	
To Biological Asset (Goats)			44,856#
To Bank (Slaughtering cost)			4,200
(Transfer of goat to inventory)			

#Note: 44,856 is calculated as the proportion of goat sold using the fair value [(1,06,800+ 226 – 19,450) x 42/82]

Subsequent measurement of goat at 30th September 20X2 **(All figures are in ₹)**

Biological Asset (Goats)	Dr.	784	
To Gain on remeasurement			784
(Subsequent measurement of goat at fair value less costs to sell [43,504## – {(1,06,800 + 226 – 19,450) – 44,856}]			

##Fair value of goat = 44,800 – 400 – 896 (2% of 44,800) = 43,504.

© The Institute of Chartered Accountants of India

4. As per para 12 of Ind AS 41, a biological asset shall be measured on initial recognition and at the end of each reporting period at its fair value less costs to sell. Therefore, regardless of who bears the transaction costs, the transaction costs of 2% are the costs to sell the goats on 1st November 20X1, and therefore, the goats should be measured at their fair value less costs to sell on initial recognition date, i.e., ₹ 9,80,000.

Journal Entry

As on 1st November 20X1:

(i) Where transaction costs are borne by the seller:

Biological assets (Goats) A/c	Dr.	9,80,000	
Loss on purchase of biological assets (Goats) A/c	Dr.	20,000	
To Bank A/c			10,00,000

(ii) Where transaction costs are borne by the seller and buyer both:

Biological assets (Goats) A/c	Dr.	9,80,000	
Loss on purchase of biological asset (Goats) A/c	Dr.	40,000	
To Bank A/c			10,20,000

As on 31st March 20X2 – under both the scenarios:

Loss on fair valuation of biological assets A/c	Dr.	98,000	
To Biological assets (Goats) A/c			98,000

[9,80,000 - (9,00,000 - 18,000)]

5.

Activity	Whether in the scope of Ind AS 41?	Remarks
Managing animal-related recreational activities like Zoo	No	Since the primary purpose is to show the animals to public for recreational purposes, there is no management of biological transformation but simply control of the number of animals. Hence it will not fall in the purview of considered in the definition of agricultural activity.

© The Institute of Chartered Accountants of India

Fishing in the ocean	No	Fishing in ocean is harvesting biological assets from unmanaged sources. There is no management of biological transformation since fish grow naturally in the ocean. Hence, it will not fall in the scope of the definition of agricultural activity.
Fish farming	Yes	Managing the growth of fish and then harvest for sale is agricultural activity within the scope of Ind AS 41 since there is management of biological transformation of biological assets for sale or additional biological assets.
Development of living organisms such as cells, bacteria viruses	Analysis required	The development of living organisms for research purposes does not qualify as agricultural activity, as those organisms are not being developed for sale, or for conversion into agricultural produce or into additional biological assets. Hence, development of such organisms for the said purposes does not fall under the scope of Ind AS 41. However, if the organisms are being developed for sale or use in dairy products, the activity will be considered as agricultural activity under the scope of Ind AS 41.
Growing of plants to be used in the production of drugs	Yes	If an entity grows plants for using it in production of drugs, the activity will be agricultural activity. Hence it will come under the scope of Ind AS 41.
Purchase of 25 dogs for security purposes of the company's premises	No	Ind AS 41 is applied to account for the biological assets when they relate to agricultural activity. Guard dogs for security purposes do not qualify as agricultural activity, since they are not being kept for sale, or for conversion into agricultural produce or into additional biological assets. Hence, they are outside the scope of Ind AS 41.

© The Institute of Chartered Accountants of India